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=> d hist

     (FILE 'HOME' ENTERED AT 19:26:47 ON 07 JUL 2005)

     FILE 'BIOSIS, MEDLINE, HCAPLUS, CABA, JAPIO, AGRICOLA, SCISEARCH,
     USPATFULL' ENTERED AT 19:27:09 ON 07 JUL 2005
L1           185 S EHEC AND VACCINE
L2           104 S L1 AND REDUC?
L3            41 S L2 AND COLONIZATION
L4            37 DUP REM L3 (4 DUPLICATES REMOVED)
L5             1 S L4 AND RUMINANT
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em l3
PROCESSING COMPLETED FOR L3
L4 37 DUP REM L3 (4 DUPLICATES REMOVED)

=> s l4 and ruminant
L5 1 L4 AND RUMINANT

=> d l5 ibib abs

L5 ANSWER 1 OF 1 USPATFULL on STN
ACCESSION NUMBER: 2002:287161 USPATFULL
TITLE: Enterohemorrhagic escherichia coli **vaccine**
INVENTOR(S): Finlay, Brett, British Columbia, CANADA
Potter, Andrew A., Saskatchewan, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002160020	A1	20021031
APPLICATION INFO.:	US 2002-39760	A1	20020103 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-259818P	20010104 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROBINS & PASTERNAK LLP, Suite 200, 90 Middlefield Road, Menlo Park, CA, 94025
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 1485
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for stimulating an immune response against a secreted enterohemorragic Escherichia coli (**EHEC**) antigen are disclosed. The compositions comprise **EHEC** cell culture supernatants.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l4 ibib abs 1-37

L4 ANSWER 1 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2005:157867 USPATFULL
TITLE: Compositions and methods for bacterial immunity and secretion of proteins
INVENTOR(S): Mecsas, Joan, Needham, MA, UNITED STATES
Balada-Llasat, Joan-Miquel, Malden, MA, UNITED STATES
Isberg, Ralph, Newton Highlands, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005136075	A1	20050623
APPLICATION INFO.:	US 2004-818071	A1	20040405 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-460887P	20030407 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LAWSON & WELTZEN, LLP, 88 BLACK FALCON AVE, SUITE 345, BOSTON, MA, 02210, US
NUMBER OF CLAIMS: 53

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 836
AB Attenuated strains of Gram negative bacteria carrying a mutation in one or more ysc genes or homologs are provided, as are methods of use for immunization against infection with a pathogenic strain and for delivery of a therapeutic agent.

L4 ANSWER 2 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2005:157862 USPATFULL
TITLE: Isolation and characterization of the csa operon (ETEC-CS4 Pili) and methods of using same
INVENTOR(S): Altboum, Zeev, Ramat Aviv, ISRAEL
Levine, Myron M., Columbia, MD, UNITED STATES
Barry, Eileen M., Elkridge, MD, UNITED STATES
PATENT ASSIGNEE(S): UNIVERSITY OF MARYLAND, BALTIMORE (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005136070	A1	20050623
APPLICATION INFO.:	US 2005-53876	A1	20050210 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-839894, filed on 20 Apr 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-198626P	20000420 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614, US
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 3556
AB Compositions comprising products of the csa operon, an isolated nucleic acid encoding the csa operon or functional fragments thereof, purified polypeptide products of the csa operon or functional fragments thereof, methods of eliciting an immune response to these products, and methods of producing products of the csa operon are disclosed herein.

L4 ANSWER 3 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2005:88021 USPATFULL
TITLE: Monoclonal antibody which agglutinates E. coli having the CS4-CFA/I family protein
INVENTOR(S): Cassels, Frederick J., Laurel, MD, UNITED STATES
Lees, Andrew, Silver Spring, MD, UNITED STATES
Schuman, Richard F., Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005075486	A1	20050407
APPLICATION INFO.:	US 2004-864803	A1	20040610 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-905046, filed on 1 Aug 1997, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Ms. Elizabeth Arwine, Esq., Staff Judge Advocate Office, U.S. Army Medical Research and Materiel Command, 504 Scott Street, ATTN: MCMR-JA, Fort Detrick,

MD, 21702-5012
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 325
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A monoclonal antibody to a consensus peptide of the formula:

VEKNITVTASVDPTIDLLQADGSALPSAVALTYSPA.

The monoclonal antibody of the invention binds exclusively to the sequence SAVALTYS and has use as a diagnostic and for prophylaxis against illness arising from E. coli which produce the CS4-CFA/I family of proteins and for treatment of disease arising therefrom.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2005:86996 USPATFULL
TITLE: Omp85 proteins of neisseria gonorrhoeae and neisseria meningitidis, compositions containing same and methods of use thereof
INVENTOR(S): Judd, Ralph C., Florence, MT, UNITED STATES
Manning, D. Scott, Missoula, MT, UNITED STATES
PATENT ASSIGNEE(S): The University of Montana, Missoula, MT, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005074458	A1	20050407
APPLICATION INFO.:	US 2003-606618	A1	20030626 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-994192, filed on 26 Nov 2001, GRANTED, Pat. No. US 6610306 Continuation of Ser. No. US 1998-177039, filed on 22 Oct 1998, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2566
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleic acid and amino acid sequences of the Omp85 proteins of N. gonorrhoeae and N. meningitidis, and fragments thereof are useful in **vaccine** compositions, therapeutic compositions and diagnostic compositions for use in the prevention, treatment and diagnosis of non-symptomatic gonococcal infection or symptomatic disease and non-symptomatic meningococcal infection and symptomatic disease. Antibodies are developed to these proteins and also useful in the compositions and methods described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2005:63038 USPATFULL
TITLE: Attenuated bacteria useful in **vaccines**
INVENTOR(S): Turner, Arthur Keith, Acambis Research Limited, Peterhouse Technology Park, 100 Fulbourn, Cambridge, UNITED KINGDOM CB1 9PT
Greenwood, Judith, Cambridge, UNITED KINGDOM
Stephens, Jonathan Clive, Cambridge, UNITED KINGDOM
Beavis, Juliet Claire, Cambridge, UNITED KINGDOM

Darsley, Michael James, Cambridge, UNITED KINGDOM

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005054075	A1	20050310	
APPLICATION INFO.:	US 2004-489273	A1	20040922	(10)
	WO 2002-GB4164		20020911	

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2001-21998	20010911

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA, 22201-4714
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: CLM-01-49
NUMBER OF DRAWINGS: 21 Drawing Page(s)
LINE COUNT: 3002
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides strains of bacteria, especially enterotoxigenic E. coli, attenuated by mutations in the genes encoding enterotoxins (LT, ST, EAST1) and optionally further attenuated by deletion of additional chromosomal genes. In addition the invention provides strains of attenuated bacteria expressing immunogenic but non-toxic variants of one or more of these enterotoxins. These bacteria are useful as a **vaccine** against diarrhoeal disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2005:4436 USPATFULL
TITLE: Plasmid maintenance system for antigen delivery
INVENTOR(S): Galen, James E., Owings Mills, MD, UNITED STATES
PATENT ASSIGNEE(S): UNIVERSITY OF MARYLAND, BALTIMORE (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005003539	A1	20050106	
APPLICATION INFO.:	US 2004-750976	A1	20040105	(10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-453313, filed on 2 Dec 1999, GRANTED, Pat. No. US 6703233 Continuation-in-part of Ser. No. US 1998-204117, filed on 2 Dec 1998, GRANTED, Pat. No. US 6413768			

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-158738P	19991012 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., SUITE 800, WASHINGTON, DC, 20037
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: CLM-1-155
NUMBER OF DRAWINGS: 28 Drawing Page(s)
LINE COUNT: 3909
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to a Plasmid Maintenance System for the stabilization of expression plasmids encoding foreign antigens, and methods for making and using the Plasmid Maintenance System. The invention optimizes the maintenance of expression plasmids at two independent levels by: (1) removing sole dependence on balanced lethal maintenance functions; and (2) incorporating at least one plasmid

partition function to prevent random segregation of expression plasmids, thereby enhancing their inheritance and stability. The Plasmid Maintenance System may be employed within a plasmid which has been recombinantly engineered to express a variety of expression products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2004:298668 USPATFULL
TITLE:	E.coli O157:H7 C1-INH-binding protein and methods of use
INVENTOR(S):	Welch, Rodney A., Madison, WI, UNITED STATES Lathem, Wyndham W., St. Louis, MO, UNITED STATES Grys, Thomas E., Madison, WI, UNITED STATES
PATENT ASSIGNEE(S):	Wisconsin Alumni Research Foundation, Madison, WI (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004234530	A1	20041125
APPLICATION INFO.:	US 2004-786445	A1	20040225 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-2309, filed on 26 Oct 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-243675P	20001026 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806, MADISON, WI, 53701
NUMBER OF CLAIMS:	16
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	23 Drawing Page(s)
LINE COUNT:	2789

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a pO157 plasmid-specified polypeptide found in E. coli EDL933 and other E. coli that binds to and cleaves C1-esterase inhibitor, and antibodies specific for the polypeptide. Also disclosed are methods employing the polypeptide for diagnosing enterohemorrhagic E. coli infection, identifying potential inhibitors of its activity, and **reducing** viscosity of material containing glycosylated polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2004:246576 USPATFULL
TITLE:	Animal model for enteric pathogens
INVENTOR(S):	Mond, James J., Silver Spring, MD, UNITED STATES Cassels, Frederick J., Laurel, MD, UNITED STATES Kokai-Kun, John F., Frederick, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004191170	A1	20040930
APPLICATION INFO.:	US 2004-473735	A1	20040603 (10)
	WO 2002-US8234		20020403

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-280736P	20010403 (60)

DOCUMENT TYPE:	Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 1300 I STREET, NW, WASHINGTON, DC, 20005
NUMBER OF CLAIMS: 32
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 876
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a reliable, low cost animal model for evaluating infections caused by enteric pathogens, including diarrheagenic Escherichia coli, such as enterotoxigenic, enterohemorrhagic, Shiga-toxin producing, and enteropathogenic E.coli. The animal model can be used for **vaccine** development and drug screening, including the screening of compounds that impair or inhibit the binding of enteric pathogens to host cells or compounds that inhibit the effects of toxins produced by the enteric pathogen. FIG. (1) represents the detection of CFA/I expressing ETEC in intestines and feces of ETEC-infected cotton rats using colony blots.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2004:208988 USPATFULL
TITLE: Plasmid maintenance system for antigen delivery
INVENTOR(S): Galen, James E., Owings Mills, MD, UNITED STATES
PATENT ASSIGNEE(S): UNIVERSITY OF MARYLAND, BALTIMORE (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004161420	A1	20040819
APPLICATION INFO.:	US 2004-750965	A1	20040105 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-453313, filed on 2 Dec 1999, GRANTED, Pat. No. US 6703233 Continuation-in-part of Ser. No. US 1998-204117, filed on 2 Dec 1998, GRANTED, Pat. No. US 6413768

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-158738P	19991012 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., SUITE 800, WASHINGTON, DC, 20037
NUMBER OF CLAIMS: 155
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 28 Drawing Page(s)
LINE COUNT: 4268
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to a Plasmid Maintenance System for the stabilization of expression plasmids encoding foreign antigens, and methods for making and using the Plasmid Maintenance System. The invention optimizes the maintenance of expression plasmids at two independent levels by: (1) removing sole dependence on balanced lethal maintenance functions; and (2) incorporating at least one plasmid partition function to prevent random segregation of expression plasmids, thereby enhancing their inheritance and stability. The Plasmid Maintenance System may be employed within a plasmid which has been recombinantly engineered to express a variety of expression products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2004:189766 USPATFULL

TITLE: **Vaccine** for transcutaneous immunization
INVENTOR(S): Glenn, Gregory M., Poolesville, MD, UNITED STATES
Cassels, Frederick J., Laurel, MD, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004146534	A1	20040729	
APPLICATION INFO.:	US 2004-467887	A1	20040322	(10)
	WO 2002-US4254		20020213	

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Page(s)
LINE COUNT: 3820
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A **vaccine** delivered by transcutaneous immunization provides an effective treatment against infections by pathogens such as, for example, enterotoxigenic Escherichia coli (ETEC) and/or for symptoms of diarrheal disease caused thereby. For example, one, two, three, four, five or more antigens derived from ETEC and capable of inducing an antigen-specific immune response (e.g., toxins, **colonization** or virulence factors) and one or more optional adjuvant (e.g., whole bacterial ADP-ribosylating exotoxins, B subunits or toxoids thereof, detoxified mutants and derivatives thereof) are used to manufacture **vaccines** or to induce systemic and/or mucosal immunity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 11 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2004:144207 USPATFULL
TITLE: M cell directed **vaccines**
INVENTOR(S): Pascual, David W., Bozeman, MT, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004109871	A1	20040610	
APPLICATION INFO.:	US 2003-660787	A1	20030912	(10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2002-US7254, filed on 12 Mar 2002, PENDING Continuation-in-part of Ser. No. US 2002-169492, filed on 21 Oct 2002, PENDING A 371 of International Ser. No. WO 2001-US426, filed on 8 Jan 2001, PENDING

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-274639P	20010312	(60)
	US 2000-174786P	20000106	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004
NUMBER OF CLAIMS: 64
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 2719
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a **vaccine** that can direct gene transfer and the transfer of other immunogens to follicle associated epithelium or M cells to induce mucosal immunity using M cell ligands for receptor-mediated endocytosis. Also provided are polynucleotides

sequences encoding M cell ligand-polybasic component fusion proteins, host cells, and methods of producing such proteins recombinantly and chemically. Further, methods are described for immunizing animal and human subjects against bacterial, viral, parasitic, fungal infectious agents or cancer and methods for assaying mucosal immunity using this **vaccine**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 12 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2004:31706 USPATFULL
TITLE: Compositions for the treatment, prevention, and diagnosis of gastrointestinal and other infections
INVENTOR(S): Boehm, Thomas, Brookline, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004023848	A1	20040205
APPLICATION INFO.:	US 2003-375690	A1	20030227 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-359831P	20020227 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 2778
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to pharmaceutical compositions that bind or kill gastrointestinal and other microorganisms, as well as methods of making and using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2004:59854 USPATFULL
TITLE: Plasmid maintenance system for antigen delivery
INVENTOR(S): Galen, James E., Owings Mills, MD, United States
PATENT ASSIGNEE(S): University of Maryland, Baltimore, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6703233	B1	20040309
APPLICATION INFO.:	US 1999-453313		19991202 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-204117, filed on 2 Dec 1998, now patented, Pat. No. US 6413768		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-158738P	19991012 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Guzo, David
LEGAL REPRESENTATIVE: Sughrue Mion, PLLC
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 32 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT: 4038
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to a Plasmid Maintenance System for the stabilization of expression plasmids encoding foreign antigens, and methods for making and using the Plasmid Maintenance System. The invention optimizes the maintenance of expression plasmids at two independent levels by: (1) removing sole dependence on balanced lethal maintenance functions; and (2) incorporating at least one plasmid partition function to prevent random segregation of expression plasmids, thereby enhancing their inheritance and stability. The Plasmid Maintenance System may be employed within a plasmid which has been recombinantly engineered to express a variety of expression products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 14 OF 37 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2004:132384 SCISEARCH
THE GENUINE ARTICLE: 765UF
TITLE: Decreased shedding of Escherichia coli O157 : H7 by cattle following vaccination with type III secreted proteins
AUTHOR: Potter A A; Klashinsky S; Li Y L; Frey E; Townsend H; Rogan D; Erickson G; Hinkley S; Klopfenstein T; Moxley R A; Smith D R; Finlay B B (Reprint)
CORPORATE SOURCE: Univ British Columbia, Biotechnol Lab, 237-6174 Univ Blvd, Vancouver, BC V6T 1Z3, Canada (Reprint); Univ British Columbia, Biotechnol Lab, Vancouver, BC V6T 1Z3, Canada; Univ Saskatchewan, Vaccine & Infect Dis Org, Saskatoon, SK S7N 5E3, Canada; Bioniche Life Sci, Belleville, ON K8N 1E2, Canada; Univ Nebraska, Inst Agr & Nat Resources, Lincoln, NE 68538 USA
bfinlay@interchange.ubc.ca
COUNTRY OF AUTHOR: Canada; USA
SOURCE: VACCINE, (2 JAN 2004) Vol. 22, No. 3-4, pp. 362-369. ISSN: 0264-410X.
PUBLISHER: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 36
ENTRY DATE: Entered STN: 13 Feb 2004
Last Updated on STN: 13 Feb 2004

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Cattle are an important reservoir of Escherichia coli O157:H7 leading to contamination of food and water, and subsequent human disease. This pathogen colonizes its hosts by producing several proteins such as Tir and EspA that are secreted by a type III secretion system. These proteins play a role in **colonization** of the intestine, suggesting that they might be useful targets for the development of a **vaccine** to **reduce** levels of this organism in cattle. Vaccination of cattle with proteins secreted by E. coli O157:H7 significantly **reduced** the numbers of bacteria shed in feces, the numbers of animals that shed, and the duration of shedding in an experimental challenge model. Vaccination of cattle also significantly (P = 0.04) **reduced** the prevalence of E. coli O157:H7 in a clinical trial conducted in a typical feedlot setting. This strategy suggests it is possible to vaccinate cattle to decrease the level of E. coli O157:H7 shedding for the purpose of **reducing** the risk of human disease. (C) 2003 Elsevier B.V.

L4 ANSWER 15 OF 37 USPATFULL on STN

ACCESSION NUMBER: 2003:282728 USPATFULL
TITLE: Mutant proteins, high potency inhibitory antibodies and fimch crystal structure
INVENTOR(S): Langermann, Solomon, Baltimore, MD, UNITED STATES

Hultgren, Scott J., Town and Country, MO, UNITED STATES
Hung, Chia-Suei, St. Louis, MO, UNITED STATES
Bouckaert, Julie, St. Louis, MO, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003199071	A1	20031023	
APPLICATION INFO.:	US 2001-15085	A1	20011210	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-254353P	20001208	(60)
	US 2001-301878P	20010629	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 47 Drawing Page(s)
LINE COUNT: 6520
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides bacterial immunogenic agents for administration to humans and non-human animals to stimulate an immune response. It particularly relates to the vaccination of mammalian species, especially human patients, with variants of the E. coli FimCH protein that elicit antibodies that have better functional inhibitory activity than antibodies raised against wild type protein. In particular, such variants include mutations that promote a more open confirmation of the FimH protein, particularly in regions involved in mannose binding, to expose regions previously poorly exposed and mutations that abolish a significantly **reduce** mannose binding. In another aspect, the invention provides antibodies against such proteins and protein complexes that may be used in passive immunization to protect or treat pathogenic bacterial infections. The present invention also provides machine readable media embedded with the three-dimensional atomic structure coordinates of FimCH bound to mannose, and subsets thereof, and methods of using the crystal structure to provide candidate amino acid residues for mutation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2003:214447 USPATFULL
TITLE: Compositions for the treatment of infectious diseases
INVENTOR(S): Gehlsen, Kurt R., Encinitas, CA, UNITED STATES
Hellstrand, Kristoffer, Gotegorg, SWEDEN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003149090	A1	20030807	
APPLICATION INFO.:	US 2002-289530	A1	20021105	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-338878P	20011106	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 2214

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Described herein are compositions and methods for the treatment of microbial infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 17 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2003:213265 USPATFULL
TITLE:	Method of stimulating and immune response by administration of host organisms that express intimin alone of as a fusion protein with one of more other antigens
INVENTOR(S):	Stewart, C. Neal, JR., Greensboro, NC, UNITED STATES McKee, Marian L., Great Falls, VA, UNITED STATES O'Brien, Alison D., Bethesda, MD, UNITED STATES Wachtel, Marian R., Albany, CA, UNITED STATES
PATENT ASSIGNEE(S):	Henry M. Jackson Foundation for the Advancement of Military Medicine (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003147902	A1	20030807
	US 6881411	B2	20050419
APPLICATION INFO.:	US 2002-150058	A1	20020520 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-696188, filed on 26 Oct 2000, GRANTED, Pat. No. US 6406885 Division of Ser. No. US 1997-840466, filed on 18 Apr 1997, GRANTED, Pat. No. US 6261561

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15938P	19960422 (60)
	US 1996-15657P	19960419 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 1300 I STREET, NW, WASHINGTON, DC, 20005
NUMBER OF CLAIMS:	36
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	23 Drawing Page(s)
LINE COUNT:	3124

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention satisfies needs in the art by providing intimin, the Enterohemorrhagic Escherichia coli (**EHEC**) adherence protein, alone or as a fusion protein with one or more other antigens, expressed by transgenic plants and the use of those plants as vehicles for stimulating a protective immune response against **EHEC** and the one or more other antigens. Various plant species are transformed to protect various animal species and also humans against **EHEC**, against pathogens expressing intimin-like proteins, and against pathogens expressing any of the one or more other antigens to which intimin may be fused.

The eae gene encoding intimin, a functional portion thereof, or a recombination that encodes a fusion protein is put under the control of a constitutive plant promoter in a plasmid and the plasmid is introduced into plants by the type of transformation appropriate for the particular plant species. The engineered plants expressing intimin or the intimin fusion protein are then fed to animals and/or humans to elicit the production of antibodies, which protect the animals/humans against **EHEC colonization** and infection, and against pathogens expressing the one or more other antigens and any cross-reactive antigens. The invention may also be practiced by expressing the intimin

or intimin fusion protein in other host organisms such as bacteria, yeast, and fungi.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 18 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2003:44373 USPATFULL
TITLE: Recombinant **vaccines** comprising immunogenic attenuated bacteria having RpoS positive phenotype
INVENTOR(S): Curtiss, Roy, III, St. Louis, MO, UNITED STATES
Nickerson, Cheryl A., River Ridge, LA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003031683	A1	20030213
APPLICATION INFO.:	US 2002-138239	A1	20020503 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-314062, filed on 18 May 1999, GRANTED, Pat. No. US 6383496
Continuation-in-part of Ser. No. US 1997-970789, filed on 14 Nov 1997, GRANTED, Pat. No. US 6024961
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: THOMPSON COBURN, LLP, ONE FIRSTAR PLAZA, SUITE 3500, ST LOUIS, MO, 63101
NUMBER OF CLAIMS: 86
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 3787
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Attenuated immunogenic bacteria having an RpoS.sup.+ phenotype, in particular, Salmonella enterica serotype Typhi having an RpoS.sup.+ phenotype and methods therefor are disclosed. The Salmonella have in addition to an RpoS.sup.+ phenotype, an inactivating mutation in one or more genes which render the microbe attenuated, and a recombinant gene capable of expressing a desired protein. The Salmonella are attenuated and have high immunogenicity so that they can be used in **vaccines** and as delivery vehicles for genes and gene products. Also disclosed are methods for preparing the **vaccine** delivery vehicles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 19 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:329864 USPATFULL
TITLE: Uropathogenic E. coli D-serine detoxification operon
INVENTOR(S): Welch, Rodney A., Madison, WI, UNITED STATES
Roesch, Paula L., Oregon, WI, UNITED STATES
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, Madison, WI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002187544	A1	20021212
APPLICATION INFO.:	US 2002-117417	A1	20020405 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-281859P	20010405 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806, MADISON, WI, 53701
NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 2059
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are methods of detecting uropathogenic E. coli genes that are differentially expressed in response to D-serine. Also disclosed are methods of characterizing bacterial isolates from clinical samples based on the ability to metabolize D-serine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 20 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:314396 USPATFULL
TITLE: Isolation and characterization of the csa operon (ETEC-CS4 pili) and methods of using same
INVENTOR(S): Altboum, Zeev, Ramat Aviv, ISRAEL
Levine, Myron M., Columbia, MD, UNITED STATES
Barry, Eileen M., Elkridge, MD, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002176868	A1	20021128	
	US 6902736	B2	20050607	
APPLICATION INFO.:	US 2001-839894	A1	20010420	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-198626P	20000420 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660
NUMBER OF CLAIMS: 81
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 3738
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions comprising products of the csa operon, an isolated nucleic acid encoding the csa operon or functional fragments thereof, purified polypeptide products of the csa operon or functional fragments thereof, methods of eliciting an immune response to these products, and methods of producing products of the csa operon are disclosed herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 21 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:287161 USPATFULL
TITLE: Enterohemorrhagic escherichia coli **vaccine**
INVENTOR(S): Finlay, Brett, British Columbia, CANADA
Potter, Andrew A., Saskatchewan, CANADA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002160020	A1	20021031	
APPLICATION INFO.:	US 2002-39760	A1	20020103	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-259818P	20010104 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROBINS & PASTERNAK LLP, Suite 200, 90 Middlefield Road, Menlo Park, CA, 94025

NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 1485
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for stimulating an immune response against a secreted enterohemorragic Escherichia coli (**EHEC**) antigen are disclosed. The compositions comprise **EHEC** cell culture supernatants.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 22 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:214437 USPATFULL
TITLE: Pathogenic escherichia coli associated protein
INVENTOR(S): Finlay, B. Brett, Richmond, CANADA
Kenny, Brendan, Bristol, UNITED KINGDOM
Stein, Markus, Quercegrossa, ITALY
Donnenberg, Michael S., Baltimore, MD, UNITED STATES
Lai, Li-Ching, Upper Arlington, OH, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002115829	A1	20020822
APPLICATION INFO.:	US 2001-967347	A1	20010928 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-171517, filed on 10 Aug 1999, PATENTED A 371 of International Ser. No. WO 1997-CA265, filed on 23 Apr 1997, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15999P	19960423 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2259
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a polypeptide, called EspA, which is secreted by pathogenic E. coli, such as the enteropathogenic (EPEC) and enterohemorrhagic (**EHEC**) E. coli. The invention also provides isolated nucleic acid sequences encoding EspA polypeptide, EspA peptides, a recombinant method for producing recombinant EspA, antibodies which bind to EspA, and a kit for the detection of EspA-producing E. coli.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 23 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:164414 USPATFULL
TITLE: Omp85 proteins of neisseria gonorrhoeae and neisseria meningitidis, compositions containing same and methods of use thereof
INVENTOR(S): Judd, Ralph C., Florence, MT, UNITED STATES
Manning, D. Scott, Missoula, MT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002086028	A1	20020704
	US 6610306	B2	20030826

APPLICATION INFO.: US 2001-994192 A1 20011126 (9)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-177039, filed on 22 Oct 1998, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321 NORRISTOWN ROAD, SPRING HOUSE, PA, 19477
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2013
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acid and amino acid sequences of the Omp85 proteins of N. gonorrhoeae and N. meningitidis, and fragments thereof are useful in **vaccine** compositions, therapeutic compositions and diagnostic compositions for use in the prevention, treatment and diagnosis of non-symptomatic gonococcal infection or symptomatic disease and non-symptomatic meningococcal infection and symptomatic disease. Antibodies are developed to these proteins and also useful in the compositions and methods described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 24 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:33165 USPATFULL
TITLE: COMPOSITIONS CONTAINING AN ALPHA 1,2-FUCOSE LINKAGE AND USES THEREOF
INVENTOR(S): PRIETO, PEDRO A., WEST WORTHINGTON, OH, UNITED STATES
RUIZ-PALACIOS, GUILLERMO M., DELEGACION TLALPAN, MEXICO
PATENT ASSIGNEE(S): ABBOTT LABORATORIES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002019991	A1	20020214
APPLICATION INFO.:	US 1998-70177	A1	19980430 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ABBOTT LABORATORIES, DEPT. 377 - AP6D-2, 100 ABBOTT PARK ROAD, ABBOTT PARK, IL, 60064-6050
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 759
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject intention relates to compositions containing at least one fucose residue in an α1-2 linkage and uses thereof. In particular, such compositions can be used in the treatment and prevention of gastrointestinal infections caused by, for example, Escherichia coil and Vibrio cholerae. The subject invention also encompasses methods of screening for the above compositions. Additionally, the subject invention includes **vaccines**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 25 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:21823 USPATFULL
TITLE: PREVENTION AND TREATMENT OF VEROTOXIN-INDUCED DISEASE
INVENTOR(S): WILLIAMS, JAMES A., LINCOLN, NE, UNITED STATES
BYRNE, LISA MARIE, STOUGHTON, WI, UNITED STATES
PUGH, CHARLES S.G., MADISON, WI, UNITED STATES

	NUMBER	KIND	DATE

PATENT INFORMATION: US 2002012658 A1 20020131
US 6652857 B2 20031125
APPLICATION INFO.: US 1999-334477 A1 19990616 (9)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-816977, filed on 13 Mar 1997, GRANTED, Pat. No. US 6080400
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KAMRIN T MACKNIGHT, MEDLEN & CARROLL LLP, 220 MONTGOMERY STREET, SUITE 2200, SAN FRANCISCO, CA, 94104
NUMBER OF CLAIMS: 51
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 5803
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention includes methods for generating neutralizing antitoxin directed against verotoxins. In preferred embodiments, the antitoxin directed against these toxins is produced in avian species using soluble recombinant verotoxin proteins. This antitoxin is designed so as to be administrable in therapeutic amounts and may be in any form (i.e., as a solid or in aqueous solution). These antitoxins are useful in the treatment of humans and other animals intoxicated with at least one bacterial toxin, as well as for preventive treatment, and diagnostic assays to detect the presence of toxin in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 26 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:12031 USPATFULL
TITLE: HISTIDINE-TAGGED INTIMIN AND METHODS OF USING INTIMIN TO STIMULATE AN IMMUNE RESPONSE AND AS AN ANTIGEN CARRIER WITH TARGETING CAPABILITY
INVENTOR(S): MCKEE, MARIAN L., GREAT FALLS, VA, UNITED STATES
O'BRIEN, ALISON D., BETHESDA, MD, UNITED STATES
WACHTEL, MARIAN R., GAITHERSBURG, MD, UNITED STATES
PATENT ASSIGNEE(S): Henry M. Jackson Foundation for the Advancement of Military Medicine (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002006407	A1	20020117
APPLICATION INFO.:	US 1997-837459	A1	19970418 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15657P	19960419 (60)
	US 1996-15936P	19960422 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FINNEGAN HENDERSON FARABOW GARRETT &, DUNNER, 1300 I STREET NW, WASHINGTON, DC, 200053315
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 2287
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention describes the isolation and purification of histidine-tagged functional portions of intimin (his-tagged intimin or his-intimin), a protein associated with the ability of certain strains of pathogenic bacteria to adhere to epithelial cells. The invention further describes the use of intimin as an antigen to promote a protective immune response. In addition, the invention describes the combination of intimin with one or more other antigens and administration of the combination to promote a protective immune

response against intimin and the one or more antigens.

One aspect of the invention is the administration of intimin to target specific epithelial cells to promote a protective immune response to intimin proteins. Additional aspects of the invention include the use of intimin or intimin combined with one or more antigens and administration of the combination to target gastrointestinal mucosa and stimulate an immune response. Additionally, the invention describes administration of the combination of intimin combined with drugs, to provide a means for targeted delivery of drugs to specific epithelial cells. Other aspects of the invention include the production of antibodies directed against his-intimin and methods of using such antibodies to provide passive immune protection, and in an assay system.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 27 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2002:144099 USPATFULL
TITLE:	Plants and plant cells expressing histidine tagged intimin
INVENTOR(S):	Stewart, Jr., C. Neal, Greensboro, NC, United States McKee, Marian L., Great Falls, VA, United States O'Brien, Alison D., Bethesda, MD, United States Wachtel, Marian R., Gaithersburg, MD, United States
PATENT ASSIGNEE(S):	Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6406885	B1	20020618
APPLICATION INFO.:	US 2000-696188		20001026 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1997-840466, filed on 18 Apr 1997, now patented, Pat. No. US 6261561		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15938P	19960422 (60)
	US 1996-15657P	19960419 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Navarro, Mark
ASSISTANT EXAMINER:	Portner, Ginny Allen
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
NUMBER OF CLAIMS:	13
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	23 Drawing Figure(s); 23 Drawing Page(s)
LINE COUNT:	2819

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention satisfies needs in the art by providing intimin, the Enterohemorrhagic Escherichia coli (**EHEC**) adherence protein, alone or as a fusion protein with one or more other antigens, expressed by transgenic plants and the use of those plants as vehicles for stimulating a protective immune response against **EHEC** and the one or more other antigens. Various plant species are transformed to protect various animal species and also humans against **EHEC**, against pathogens expressing intimin-like proteins, and against pathogens expressing any of the one or more other antigens to which intimin may be fused.

The eae gene encoding intimin, a functional portion thereof, or a recombination that encodes a fusion protein is put under the control of a constitutive plant promoter in a plasmid and the plasmid is introduced

into plants by the type of transformation appropriate for the particular plant species. The engineered plants expressing intimin or the intimin fusion protein are then fed to animals and/or humans to elicit the production of antibodies, which protect the animals/humans against **EHEC colonization** and infection, and against pathogens expressing the one or more other antigens and any cross-reactive antigens. The invention may also be practiced by expressing the intimin or intimin fusion protein in other host organisms such as bacteria, yeast, and fungi.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 28 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2002:102056 USPATFULL
TITLE:	Recombinant **vaccines** comprising immunogenic attenuated bacteria having RPOS positive phenotype
INVENTOR(S):	Curtiss, III, Roy, St. Louis, MO, United States Nickerson, Cheryl A., River Ridge, LA, United States
PATENT ASSIGNEE(S):	Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6383496	B1	20020507
APPLICATION INFO.:	US 1999-314062		19990518 (9)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-970789, filed on 14 Nov 1997, now patented, Pat. No. US 6024961
DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Mosher, Mary E.
LEGAL REPRESENTATIVE:	Thompson Coburn LLP
NUMBER OF CLAIMS:	31
EXEMPLARY CLAIM:	1,23
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT:	3579

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Attenuated immunogenic bacteria having an RpoS.sup.+ phenotype, in particular, Salmonella enterica serotype Typhi having an RpoS.sup.+ phenotype and methods therefor are disclosed. The Salmonella have in addition to an RpoS.sup.+ phenotype, an inactivating mutation in one or more genes which render the microbe attenuated, and a recombinant gene capable of expressing a desired protein. The Salmonella are attenuated and have high immunogenicity so that they can be used in **vaccines** and as delivery vehicles for genes and gene products. Also disclosed are methods for preparing the **vaccine** delivery vehicles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 29 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2002:50620 USPATFULL
TITLE:	Pathogenic Escherichia coli associated protein EspA
INVENTOR(S):	Finlay, B. Brett, Richmond, CANADA Kenny, Brendan, Redland, UNITED KINGDOM Stein, Markus, Quercegrossa, ITALY Donnenberg, Michael S., Baltimore, MD, United States Lai, Li-Ching, Upper Arlington, OH, United States
PATENT ASSIGNEE(S):	University of British Columbia, Vancouver, CANADA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6355254	B1	20020312

	WO 9740063	19971030	
APPLICATION INFO.:	US 1999-171517	19990810	(9)
	WO 1997-CA265	19970423	
		19990810	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15999P	19960423 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Graser, Jennifer E.
LEGAL REPRESENTATIVE: SEED Intellectual Property Law Group PLLC
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 2147
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides the EspA polypeptide, which is secreted by pathogenic E coli, such as the enteropathogenic (EPEC) and enterohemorrhagic (**EHEC**) E coli. Diagnosis of disease caused by such pathogenic E coli can be performed by standard techniques, such as those based upon the use of antibodies which bind to EspA to detect the protein, as well as those based on the use of nucleic acid probes for detection of nucleic acids encoding EspA protein. The invention also provides isolated nucleic acid sequences encoding EspA, EspA polypeptide, EspA peptides, a method for producing recombinant EspA, antibodies which bind to EspA, and a kit for the detection of EspA-producing E coli. The invention also provides a method of immunizing a host with EspA to induce a protective immune response to EspA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 30 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2002:19176 USPATFULL
TITLE: Method of detecting shigella and shigella mxiM DNA
INVENTOR(S): Schuch, Raymond, Washington, DC, United States
Sandlin, Robin C., Columbia, MD, United States
Maurelli, Anthony T., Silver Spring, MD, United States
PATENT ASSIGNEE(S): The Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6342352	B1	20020129	
APPLICATION INFO.:	US 1999-296670		19990422	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-82944P	19980424 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Devi, S.
LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 2019
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to our discovery that the mxiM protein of Shigella flexneri is indispensable for the spread of Shigella from cell to cell. Thus, the invention provides the mxiM protein or peptides or

portions thereof as antigens in **vaccines** to prevent Shigella infections and treat hosts infected with Shigella by inhibiting intercellular spread. In another aspect, the invention relates to antibodies generated against the mxiM proteins, peptides, or portions thereof to detect Shigella in contaminated food and water supplies as well as in infected hosts. The present invention also describes a method called the TIER (test of intracellular expression requirements) for determining the intracellular expression requirements of genes and therefore, permitting one to establish the role of genes in the pathogenesis of organisms. A method of detecting Shigella or Shigella mxiM DNA in a sample using a mxiM DNA probe is also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 31 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2001:111832 USPATFULL
TITLE:	Method of stimulating an immune response by administration of host organisms that express intimin alone or as a fusion protein with one or more other antigens
INVENTOR(S):	Stewart, Jr., C. Neal, Greensboro, NC, United States McKee, Marian L., Great Falls, VA, United States O'Brien, Alison D., Bethesda, MD, United States Wachtel, Marian R., Albany, CA, United States
PATENT ASSIGNEE(S):	Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6261561	B1	20010717	
APPLICATION INFO.:	US 1997-840466		19970418	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15657P	19960419 (60)
	US 1996-15938P	19960422 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Smith, Lynette R F.
ASSISTANT EXAMINER:	Portner, Ginny Allen
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
NUMBER OF CLAIMS:	13
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	23 Drawing Figure(s); 23 Drawing Page(s)
LINE COUNT:	2817

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention satisfies needs in the art by providing intimin, the Enterohemorrhagic Escherichia coli (**EHEC**) adherence protein, alone or as a fusion protein with one or more other antigens, expressed by transgenic plants and the use of those plants as vehicles for stimulating a protective immune response against **EHEC** and the one or more other antigens. Various plant species are transformed to protect various animal species and also humans against **EHEC**, against pathogens expressing intimin-like proteins, and against pathogens expressing any of the one or more other antigens to which intimin may be fused.

The eae gene encoding intimin, a functional portion thereof, or a recombination that encodes a fusion protein is put under the control of a constitutive plant promoter in a plasmid and the plasmid is introduced into plants by the type of transformation appropriate for the particular plant species. The engineered plants expressing intimin or the intimin

fusion protein are then fed to animals and/or humans to elicit the production of antibodies, which protect the animals/humans against **EHEC colonization** and infection, and against pathogens expressing the one or more other antigens and any cross-reactive antigens. The invention may also be practiced by expressing the intimin or intimin fusion protein in other host organisms such as bacteria, yeast, and fungi.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 32 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2001:82536 USPATFULL
TITLE:	Treatment of bacterial infections
INVENTOR(S):	Bjorck, Lars, Lund, Sweden Sjorbring, Ulf, Lund, Sweden Nasr, Abdelhakim Ben, Cambridge, United Kingdom Olsen, Arne, Bjarred, Sweden Herwald, Heiko, Malmo, Sweden Muller-Esterl, Werner, Mainz, Germany, Federal Republic of Mattsson, Eva, Lund, Sweden
PATENT ASSIGNEE(S):	Actinova Limited, United Kingdom (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6242210	B1	20010605
APPLICATION INFO.:	US 1999-258688		19990226 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 194098		

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Leary, Louise N.
LEGAL REPRESENTATIVE:	Seed IP Law Group
NUMBER OF CLAIMS:	5
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	40 Drawing Figure(s); 18 Drawing Page(s)
LINE COUNT:	2437

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An assay for compounds useful in the treatment of a bacterial induced coagulation disorder has the following steps:

a) incubating a plasma sample with a strain of bacteria;

b) adding a compound to be assayed to the plasma sample before, during or after step (a);

c) conducting an activated partial thromboplastin time test;

d) determining the clotting time.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 33 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2001:59866 USPATFULL
TITLE:	Use of kinin antagonists for preparing a pharmaceutical composition for treating bacterial infections
INVENTOR(S):	Bjorck, Lars, Lund, Sweden Sjobring, Ulf, Lund, Sweden Nasr, Abdelhakim Ben, Cambridge, United Kingdom Olsen, Arne, Lund, Sweden Herwald, Heiko, Lund, Sweden Muller-Esterl, Werner, Mainz, Germany, Federal Republic of
PATENT ASSIGNEE(S):	Actinova Limited, Cambridge, United Kingdom (non-U.S.

corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6221845	B1	20010424	
	WO 9744353		19971127	
APPLICATION INFO.:	US 1999-194098		19990625	(9)
	WO 1997-SE825		19970520	
			19990625	PCT 371 date
			19990625	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	SE 1996-1901	19960520

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Weddington, Kevin E.
LEGAL REPRESENTATIVE: Seed IP Law Group PLLC
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 27 Drawing Figure(s); 13 Drawing Page(s)
LINE COUNT: 1607
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Kinin antagonists, especially bradykinin antagonists, can be used for treating bacterial infections, in particular infections caused by bacteria belonging to the genera Streptococcus, Escherichia, Salmonella, Staphylococcus, Klebsiella, Moracella, Haemophilus and Yersinia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 34 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2000:80408 USPATFULL
TITLE: Compositions for the prevention and treatment of verotoxin-induced disease
INVENTOR(S): Williams, James A., Lincoln, NE, United States
Byrne, Lisa Marie, Stoughton, WI, United States
PATENT ASSIGNEE(S): Ophidian Pharmaceuticals, Inc., Wisconsin, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6080400		20000627	
APPLICATION INFO.:	US 1997-816977		19970313	(8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-410058, filed on 24 Mar 1995, now abandoned			

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Housel, James C.
ASSISTANT EXAMINER: Devi, S.
LEGAL REPRESENTATIVE: Medlen & Carroll, LLP
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 5468
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention includes methods for generating neutralizing antitoxin directed against verotoxins. In preferred embodiments, the antitoxin directed against these toxins is produced in avian species using soluble recombinant verotoxin proteins. This antitoxin is designed so as to be administrable in therapeutic amounts and may be in any form (i.e., as a solid or in aqueous solution). These antitoxins are useful in the treatment of humans and other animals intoxicated with at least one bacterial toxin, as well as for preventive treatment, and diagnostic

assays to detect the presence of toxin in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 35 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2000:18049 USPATFULL
TITLE: Recombinant avirulent immunogenic S typhi having rpos positive phenotype
INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
Nickerson, Cheryl A., Chesterfield, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6024961		20000215
APPLICATION INFO.:	US 1997-970789		19971114 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Mosher, Mary E.
LEGAL REPRESENTATIVE: Howell & Haferkamp, L.C.
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1,39
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 2837
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Avirulent immunogenic Salmonella enterica serotype Typhi and methods therefor are disclosed. The Salmonella have an RpoS.sup.+ phenotype, an inactivating mutation in one or more genes which renders the microbe avirulent, and a recombinant gene capable of expressing a desired protein. The Salmonella are avirulent and have high immunogenicity so that they can be used in **vaccines** and as delivery vehicles for the desired antigen. Also disclosed are methods for preparing the Salmonella and **vaccine** delivery vehicles therefor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 36 OF 37 USPATFULL on STN
ACCESSION NUMBER: 1998:85588 USPATFULL
TITLE: Gua mutants of shigella spp. and **vaccines** containing the same
INVENTOR(S): Noriega, Fernando R., Baltimore, MD, United States
Levine, Myron M., Columbia, MD, United States
PATENT ASSIGNEE(S): University of Maryland at Baltimore, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5783196		19980721
APPLICATION INFO.:	US 1996-629600		19960409 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chin, Christopher L.
ASSISTANT EXAMINER: Portner, Ginny Allen
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas, PLLC
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1839
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB gua mutants of Shigella spp., and **vaccines** containing the same are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 37 OF 37 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 1

ACCESSION NUMBER: 1998:435240 BIOSIS
DOCUMENT NUMBER: PREV199800435240
TITLE: Escherichia coli O157:H7 requires intimin for enteropathogenicity in calves.
AUTHOR(S): Dean-Nystrom, Evelyn A. [Reprint author]; Bosworth, Brad T.; Moon, Harley W.; O'Brien, Alison D.
CORPORATE SOURCE: USDA, ARS, Natl. Anim. Dis. Cent., P.O. Box 70, Ames, IA 50010-0070, USA
SOURCE: Infection and Immunity, (Sept., 1998) Vol. 66, No. 9, pp. 4560-4563. print.
CODEN: INFIBR. ISSN: 0019-9567.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Oct 1998
Last Updated on STN: 7 Oct 1998

AB Enterohemorrhagic Escherichia coli (**EHEC**) strains require intimin to induce attaching and effacing (A/E) lesions in newborn piglets. Infection of newborn calves with intimin-positive or intimin-negative **EHEC** O157:H7 demonstrated that intimin is needed for **colonization**, A/E lesions, and disease in cattle. These results suggest that experiments to determine if intimin-based **vaccines reduce** O157:H7 levels in cattle are warranted.

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WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Thursday, July 07, 2005

Hide?	Set Name	Query	Hit Count
	DB=EPAB; PLUR=YES; OP=OR		
☐	L8	WO-200253181-A1.did.	0
☐	L7	WO-200253181-A1.did.	0
☐	L6	WO-200253181-A1.did.	0
	DB=PGPB; PLUR=YES; OP=OR		
☐	L5	US-20020160020-A1.did.	1
	DB=EPAB; PLUR=YES; OP=OR		
☐	L4	WO-200253181-A1.did.	0
☐	L3	WO-2004050119-A1.did.	1
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=OR		
☐	L2	L1 and EspA	17
☐	L1	ehec	758

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 10 of 17 returned.

☐ 1. Document ID: US 20050100899 A1

L2: Entry 1 of 17 File: PGPB May 12, 2005

PGPUB-DOCUMENT-NUMBER: 20050100899
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050100899 A1

TITLE: Screening assays

PUBLICATION-DATE: May 12, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Knutton, Stuart	Birmingham		GB	
Frankel, Gad Meir	London		GB	

US-CL-CURRENT: 435/6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Draw De

☐ 2. Document ID: US 20040219530 A1

L2: Entry 2 of 17 File: PGPB Nov 4, 2004

PGPUB-DOCUMENT-NUMBER: 20040219530
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040219530 A1

TITLE: Array and uses thereof

PUBLICATION-DATE: November 4, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Brousseau, Roland	Montreal		CA	
Harel, Josee	Saint-Bruno		CA	
Bekal, Sadjia	Montreal		CA	

US-CL-CURRENT: 435/6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Draw De

☐ 3. Document ID: US 20040086513 A1

L2: Entry 3 of 17 File: PGPB May 6, 2004

PGPUB-DOCUMENT-NUMBER: 20040086513
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040086513 A1

TITLE: Antibodies for preventing and treating attaching and effacing escherichia coli (aeec) associated diseases

PUBLICATION-DATE: May 6, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Fairbrother, John M.	Saint-Hyacinthe		CA	
Harel, Josee	Saint-Bruno		CA	
Batisson, Isabelle	Clermenton-Ferrand		FR	
Girard, Francis	Saint-Hyacinthe		CA	
Guimond, Marie-Pierre	Montreal		CA	

US-CL-CURRENT: 424/169.1; 530/388.4, 800/6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 4. Document ID: US 20030166841 A1

L2: Entry 4 of 17 File: PGPB Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030166841
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030166841 A1

TITLE: ESCHERICHIA COLI SECRETED PROTEIN B

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kaper, James B.	Pasadena	MD	US	
Jarvis, Karen	Arnold	MD	US	

US-CL-CURRENT: 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 5. Document ID: US 20030143558 A1

L2: Entry 5 of 17 File: PGPB Jul 31, 2003

PGPUB-DOCUMENT-NUMBER: 20030143558
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030143558 A1

TITLE: Methods for attenuation of virulence in bacteria

PUBLICATION-DATE: July 31, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mitchell, Wayne	San Francisco	CA	US	
Cota, Adam	Berkeley	CA	US	
Robert, T. Guy	Oakland	CA	US	

US-CL-CURRENT: 435/6; 702/20

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

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☐ 6. Document ID: US 20020160020 A1

L2: Entry 6 of 17 File: PGPB Oct 31, 2002

PGPUB-DOCUMENT-NUMBER: 20020160020
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020160020 A1

TITLE: Enterohemorrhagic escherichia coli vaccine

PUBLICATION-DATE: October 31, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Finlay, Brett	British Columbia		CA	
Potter, Andrew A.	Saskatchewan		CA	

US-CL-CURRENT: 424/257.1; 435/252.33

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

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☐ 7. Document ID: US 20020115829 A1

L2: Entry 7 of 17 File: PGPB Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020115829
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020115829 A1

TITLE: Pathogenic escherichia coli associated protein

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Finlay, B. Brett	Richmond	MD	CA	
Kenny, Brendan	Bristol	OH	GB	
Stein, Markus	Quercegrossa		IT	
Donnenberg, Michael S.	Baltimore		US	
Lai, Li-Ching	Upper Arlington		US	

US-CL-CURRENT: 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

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☐ 8. Document ID: US 6635259 B2

L2: Entry 8 of 17 File: USPT Oct 21, 2003

US-PAT-NO: 6635259
DOCUMENT-IDENTIFIER: US 6635259 B2

TITLE: Escherichia coli secreted protein B

DATE-ISSUED: October 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kaper; James B.	Pasadena	MD		
Jarvis; Karen	Arnold	MD		

US-CL-CURRENT: 424/241.1; 424/185.1, 424/190.1, 435/6, 435/7.1, 435/7.2, 435/7.32, 435/7.37, 530/350, 530/402

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 9. Document ID: US 6355254 B1

L2: Entry 9 of 17 File: USPT Mar 12, 2002

US-PAT-NO: 6355254
DOCUMENT-IDENTIFIER: US 6355254 B1

TITLE: Pathogenic Escherichia coli associated protein EspA

DATE-ISSUED: March 12, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Finlay; B. Brett	Richmond			CA
Kenny; Brendan	Redland			GB

Stein; Markus	Quercegrossa		IT
Donnenberg; Michael S.	Baltimore	MD	
Lai; Li-Ching	Upper Arlington	OH	

US-CL-CURRENT: 424/241.1; 424/185.1, 424/190.1, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 10. Document ID: US 6291435 B1

L2: Entry 10 of 17 File: USPT Sep 18, 2001

US-PAT-NO: 6291435
DOCUMENT-IDENTIFIER: US 6291435 B1

TITLE: Treatment of diarrhea caused by enteropathogenic Escherichia coli

DATE-ISSUED: September 18, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yanmaele; Rosa P.	Edmonton			CA
Armstrong; Glen D.	Edmonton			CA

US-CL-CURRENT: 514/25; 514/53, 514/867, 536/17.2, 536/55.1, 536/55.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
L1 and EspA	17

Display Format: - Change Format

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Search Results - Record(s) 11 through 17 of 17 returned.

☐ 11. Document ID: US 6204004 B1

L2: Entry 11 of 17 File: USPT Mar 20, 2001

US-PAT-NO: 6204004
DOCUMENT-IDENTIFIER: US 6204004 B1

TITLE: Immunodiagnostic test for enterohemorrhagic Escherichia coli infection

DATE-ISSUED: March 20, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kaper; James B.	Pasadena	MD		
Jarvis; Karen	Arnold	MD		

US-CL-CURRENT: 435/7.37; 435/6, 435/7.32, 530/402, 536/23.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

☐ 12. Document ID: WO 9740063 A2

L2: Entry 12 of 17 File: EPAB Oct 30, 1997

PUB-NO: WO009740063A2
DOCUMENT-IDENTIFIER: WO 9740063 A2
TITLE: PATHOGENIC ESCHERICHIA COLI ASSOCIATED PROTEIN

PUBN-DATE: October 30, 1997

INVENTOR-INFORMATION:

NAME	COUNTRY
FINLAY, B BRETT	CA
STEIN, MARKUS	CA
KENNY, BRENDAN	CA

INT-CL (IPC): C07 K 0/
EUR-CL (EPC): C07K014/245; C07K016/12

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

☐ 13. Document ID: AU 2002347314 A1, WO 2004050119 A1

L2: Entry 13 of 17 File: DWPI Jun 23, 2004

DERWENT-ACC-NO: 2004-450616
DERWENT-WEEK: 200472

TITLE: Pharmaceutical composition useful for treating diarrhea, having polypeptide or polypeptides and/or polynucleotide or polynucleotides in combination comprising or encoding polypeptide or polypeptides in combination having EspA polypeptides

INVENTOR: FRANKEL, G M; KNUTTON, S

PRIORITY-DATA: 2002WO-GB05374 (November 29, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 2002347314 A1	June 23, 2004		000	A61K039/108
WO 2004050119 A1	June 17, 2004	E	093	A61K039/108

INT-CL (IPC): A23 C 9/00; A61 K 39/108; C07 K 14/245; C12 R 1:225

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 14. Document ID: US 20030166841 A1, US 6635259 B2

L2: Entry 14 of 17 File: DWPI Sep 4, 2003

DERWENT-ACC-NO: 2003-898104
DERWENT-WEEK: 200382

TITLE: New purified protein called EspB or EspA isolated from enterohemorrhagic Escherichia coli (EHEC), useful for diagnosing whether a subject has been infected with EHEC

INVENTOR: JARVIS, K; KAPER, J B

PRIORITY-DATA: 1997US-0821872 (March 21, 1997), 2001US-0769086 (January 24, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20030166841 A1	September 4, 2003		019	C12P019/12
US 6635259 B2	October 21, 2003		000	A61K039/08

INT-CL (IPC): A61 K 39/08; C07 K 1/00; C07 K 14/00; C07 K 17/00; C12 P 19/12

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 15. Document ID: JP 2004516333 W, WO 200253181 A1, US 20020160020 A1, EP 1349570 A1, BR 200206312 A, AU 2002218927 A1

L2: Entry 15 of 17 File: DWPI Jun 3, 2004

DERWENT-ACC-NO: 2002-557723
DERWENT-WEEK: 200436

TITLE: Vaccine composition useful for eliciting immunological response in ruminant and for reducing colonization or shedding of enterohemorragic Escherichia coli, comprises enterohemorragic E. coli cell culture supernatant

INVENTOR: FINLAY, B; POTTER, A A

PRIORITY-DATA: 2001US-259818P (January 4, 2001), 2002US-0039760 (January 3, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2004516333 W	June 3, 2004		087	A61K039/108
WO 200253181 A1	July 11, 2002	E	053	A61K039/108
US 20020160020 A1	October 31, 2002		000	A61K039/108
EP 1349570 A1	October 8, 2003	E	000	A61K039/108
BR 200206312 A	February 17, 2004		000	A61K039/108
AU 2002218927 A1	July 16, 2002		000	A61K039/108

INT-CL (IPC): A61 K 35/74; A61 K 39/108; A61 K 39/39; A61 P 31/00; A61 P 31/04; C07 K 1/02; C07 K 1/34; C07 K 14/245; C12 N 1/20

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 16. Document ID: US 6204004 B1

L2: Entry 16 of 17 File: DWPI Mar 20, 2001

DERWENT-ACC-NO: 2001-256675
DERWENT-WEEK: 200382

TITLE: Diagnosis of active infection by enterohemorrhagic Escherichia coli comprises detecting antibodies to E. coli secreted protein EspA or EspB

INVENTOR: JARVIS, K; KAPER, J B

PRIORITY-DATA: 1997US-0821872 (March 21, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6204004 B1	March 20, 2001		019	G01N033/569

INT-CL (IPC): G01 N 33/569

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 17. Document ID: WO 9924576 A1, JP 2001522605 W, AU 9911373 A, EP 1029054 A1

L2: Entry 17 of 17 File: DWPI May 20, 1999

DERWENT-ACC-NO: 1999-337712
DERWENT-WEEK: 200204

TITLE: New translocated intimin receptor useful for treating infection by enteropathogenic or enterohemorrhagic Escherichia coli

INVENTOR: DEVINNEY, R; FINLAY, B B ; KENNY, B ; STEIN, M

PRIORITY-DATA: 1997US-065130P (November 12, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9924576 A1	May 20, 1999	E	091	C12N015/31
JP 2001522605 W	November 20, 2001		097	C12N015/09
AU 9911373 A	May 31, 1999		000	
EP 1029054 A1	August 23, 2000	E	000	C12N015/31

INT-CL (IPC): A61 K 38/00; A61 K 38/16; A61 P 1/00; A61 P 31/04; C07 K 14/24; C07 K 16/12; C12 N 5/10; C12 N 15/09; C12 N 15/31; C12 N 15/62; C12 P 21/02; C12 P 21/08; C12 Q 1/68; G01 N 33/53; C12 P 21/02; C12 R 1:19

Terms	Documents
L1 and EspA	17

L2: Entry 15 of 17 File: DWPI Jun 3, 2004

DERWENT-ACC-NO: 2002-557723
DERWENT-WEEK: 200436

Not good

TITLE: Vaccine composition useful for eliciting immunological response in ruminant and for reducing colonization or shedding of enterohemorragic Escherichia coli, comprises enterohemorragic E. coli cell culture supernatant

INVENTOR: FINLAY, B; POTTER, A A

PRIORITY-DATA: 2001US-259818P (January 4, 2001), 2002US-0039760 (January 3, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2004516333 W	June 3, 2004		087	A61K039/108
WO 200253181 A1	July 11, 2002	E	053	A61K039/108
US 20020160020 A1	October 31, 2002		000	A61K039/108
EP 1349570 A1	October 8, 2003	E	000	A61K039/108
BR 200206312 A	February 17, 2004		000	A61K039/108
AU 2002218927 A1	July 16, 2002		000	A61K039/108

INT-CL (IPC): A61 K 35/74; A61 K 39/108; A61 K 39/39; A61 P 31/00; A61 P 31/04; C07 K 1/02; C07 K 1/34; C07 K 14/245; C12 N 1/20

ABSTRACTED-PUB-NO: WO 200253181A
BASIC-ABSTRACT:

NOVELTY - A vaccine composition (I) comprises an enterohemorragic Escherichia coli (EHEC) cell culture supernatant (CCS) and an immunological adjuvant.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for use of EHEC cell culture supernatant in the manufacture of a composition for eliciting an immunological response in a mammal against a secreted EHEC antigen.

ACTIVITY - Antibacterial; immunostimulant.

MECHANISM OF ACTION - Vaccine; Stimulator of immune response (claimed).

The effect of vaccine containing EHEC CCS on dairy cows were studied. Twenty adult dairy cows were divided in 2 groups of 10 cows. Group 1 was immunized with CCS vaccine and group 2 was immunized with saline-vaccine on days 1 and 22. Seroconversion was assayed by enzyme linked immunosorbent assay (ELISA) on days 1 (pre-immunization), 22 and 36. On days 22 and 36, group 1 cows showed specific

antibody titers against EspA and Tir, and group 2 cows showed no specific antibody titers. At day 36, groups 1 and 2 cows were challenged with 108 colony forming units (CFU) of EHEC O157:H7 and shedding was monitored daily for 14 days. Fewer group 1 cows shed EHEC O157:H7 for short period of time than groups 2 cows. After 6 months, group 1 and 2 cows were again immunized. On day 14 following the 2nd boost, antibody titers were assayed by ELISA. Group 1 cows had specific antibody titers to EspA and Tir, and group 2 cows had no specific antibody titers. On day 14 following the 2nd boost, group 1 and 2 cows were again challenged with 108 CFU of EHEC O157:H7 and shedding was monitored daily for 14 days. Fewer group 1 (CCS) cows shed EHEC O157:H7 for short period of time, than group 2 (saline) cows.

USE - (I) is useful for eliciting an immunological response in a mammal, especially ruminant (bovine subject) against a secreted EHEC antigen, and for reducing colonization or shedding of EHEC (claimed), such as reducing the number of animals shedding EHEC, and reducing the time in which EHEC are shed into the environment, thus reducing the contamination of environment, meat or water. (I) is useful as an adjunct to other biological, chemical, biologically engineered, nucleic acid-based or recombinant protein anti-EHEC agents. (I) is also useful for treating or preventing EHEC infections in other mammals such as humans.

ADVANTAGE - (I) comprising CCS is prepared in an easier and inexpensive manner. CCS is effective at dose regimens that have minimal toxicity.

ABSTRACTED-PUB-NO: WO 200253181A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.0/9

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First Hit Previous Doc Next Doc Go to Doc#

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L2: Entry 15 of 17 File: DWPI Jun 3, 2004

DERWENT-ACC-NO: 2002-557723
DERWENT-WEEK: 200436

TITLE: Vaccine composition useful for eliciting immunological response in ruminant and for reducing colonization or shedding of enterohemorragic Escherichia coli, comprises enterohemorragic E. coli cell culture supernatant

INVENTOR: FINLAY, B; POTTER, A A

PATENT-ASSIGNEE:

ASSIGNEE	CODE
UNIV BRITISH COLUMBIA	UYBRN
UNIV SASKATCHEWAN	UYSAN
FINLAY B	FINLI
POTTER A A	POTTI

PRIORITY-DATA: 2001US-259818P (January 4, 2001), 2002US-0039760 (January 3, 2002)

Search Selected Search ALL Clear

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2004516333 W	June 3, 2004		087	A61K039/108
WO 200253181 A1	July 11, 2002	E	053	A61K039/108
US 20020160020 A1	October 31, 2002		000	A61K039/108
EP 1349570 A1	October 8, 2003	E	000	A61K039/108
BR 200206312 A	February 17, 2004		000	A61K039/108
AU 2002218927 A1	July 16, 2002		000	A61K039/108

DESIGNATED-STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP2004516333W	January 3, 2002	2002JP-0554130	
JP2004516333W	January 3, 2002	2002WO-CA00019	

JP2004516333W		WO 200253181	Based on
WO 200253181A1	January 3, 2002	2002WO-CA00019	
US20020160020A1	January 4, 2001	2001US-259818P	Provisional
US20020160020A1	January 3, 2002	2002US-0039760	
EP 1349570A1	January 3, 2002	2002EP-0726978	
EP 1349570A1	January 3, 2002	2002WO-CA00019	
EP 1349570A1		WO 200253181	Based on
BR 200206312A	January 3, 2002	2002BR-0006312	
BR 200206312A	January 3, 2002	2002WO-CA00019	
BR 200206312A		WO 200253181	Based on
AU2002218927A1	January 3, 2002	2002AU-0218927	
AU2002218927A1		WO 200253181	Based on

INT-CL (IPC): A61 K 35/74; A61 K 39/108; A61 K 39/39; A61 P 31/00; A61 P 31/04; C07 K 1/02; C07 K 1/34; C07 K 14/245; C12 N 1/20

ABSTRACTED-PUB-NO: WO 200253181A
BASIC-ABSTRACT:

NOVELTY - A vaccine composition (I) comprises an enterohemorragic Escherichia coli (EHEC) cell culture supernatant (CCS) and an immunological adjuvant.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for use of EHEC cell culture supernatant in the manufacture of a composition for eliciting an immunological response in a mammal against a secreted EHEC antigen.

ACTIVITY - Antibacterial; immunostimulant.

MECHANISM OF ACTION - Vaccine; Stimulator of immune response (claimed).

The effect of vaccine containing EHEC CCS on dairy cows were studied. Twenty adult dairy cows were divided in 2 groups of 10 cows. Group 1 was immunized with CCS vaccine and group 2 was immunized with saline-vaccine on days 1 and 22. Seroconversion was assayed by enzyme linked immunosorbent assay (ELISA) on days 1 (pre-immunization), 22 and 36. On days 22 and 36, group 1 cows showed specific antibody titers against EspA and Tir, and group 2 cows showed no specific antibody titers. At day 36, groups 1 and 2 cows were challenged with 108 colony forming units (CFU) of EHEC O157:H7 and shedding was monitored daily for 14 days. Fewer group 1 cows shed EHEC O157:H7 for short period of time than groups 2 cows. After 6 months, group 1 and 2 cows were again immunized. On day 14 following the 2nd boost, antibody titers were assayed by ELISA. Group 1 cows had specific antibody titers to EspA and Tir, and group 2 cows had no specific antibody titers. On day 14 following the 2nd boost, group 1 and 2 cows were again challenged with 108 CFU of EHEC O157:H7 and shedding was monitored daily for 14 days. Fewer group 1 (CCS) cows shed EHEC O157:H7 for short period of time, than group 2 (saline) cows.

USE - (I) is useful for eliciting an immunological response in a mammal, especially ruminant (bovine subject) against a secreted EHEC antigen, and for reducing colonization or shedding of EHEC (claimed), such as reducing the number of animals shedding EHEC, and reducing the time in which EHEC are shed into the environment, thus reducing the contamination of environment, meat or water. (I) is useful as an adjunct to other biological, chemical, biologically engineered, nucleic acid-based or recombinant protein anti-EHEC agents. (I) is also useful for treating or preventing EHEC infections in other mammals such as humans.

ADVANTAGE - (I) comprising CCS is prepared in an easier and inexpensive manner. CCS is effective at dose regimens that have minimal toxicity.

CHOSEN-DRAWING: Dwg.0/9

TITLE-TERMS: VACCINE COMPOSITION USEFUL ELICIT IMMUNOLOGICAL RESPOND RUMINANT REDUCE COLONY SHED ESCHERICHIA COLI COMPRISE COLI CELL CULTURE SUPERNATANT

DERWENT-CLASS: B04 C06 D16

CPI-CODES: B04-B04C; B04-F10A3; B10-A22; B14-A01A3; B14-G01; B14-S11B; B14-S12; C04-B04C; C04-F10A3; C10-A22; C14-A01A3; C14-G01; C14-S11B; C14-S12; D05-H07; D05-H08;

CHEMICAL-CODES:

Chemical Indexing M1 *01*
Fragmentation Code
M421 M423 M431 M782 M905 P220 P434 Q233
Specfic Compounds
A0218K A0218T A0218M

Chemical Indexing M1 *02*
Fragmentation Code
M421 M423 M431 M782 M905 P220 P434 Q233
Specfic Compounds
A00GTK A00GTT A00GTM

Chemical Indexing M1 *03*
Fragmentation Code
M421 M423 M431 M782 M905 P220 P434 Q233
Specfic Compounds
A00H3K A00H3T A00H3M

Chemical Indexing M1 *04*
Fragmentation Code
M421 M423 M431 M782 M905 P220 P434 Q233
Specfic Compounds
A00H1K A00H1T A00H1M

Chemical Indexing M2 *05*
Fragmentation Code
C035 C100 C720 C800 C801 C803 C804 C805 C806 C807
H1 H181 K0 L7 L722 M210 M211 M225 M231 M273
M283 M320 M411 M431 M510 M520 M530 M540 M620 M640
M782 M904 M905 P220 P434 Q233
Specfic Compounds
11591K 11591T 11591M

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C2002-158350

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First Hit Previous Doc Next Doc Go to Doc#

End of Result Set

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L3: Entry 1 of 1 File: EPAB Jun 17, 2004

PUB-NO: WO2004050119A1
DOCUMENT-IDENTIFIER: WO 2004050119 A1
TITLE: VACCINE AGAINST ENTEROPATHOGENIC AND ENTEROHAEMORRAGIC ESCHERICHIA COLI

PUBN-DATE: June 17, 2004

INVENTOR-INFORMATION:

NAME	COUNTRY
KNUTTON, STUART	GB
FRANKEL, GAD MEIR	GB

ASSIGNEE-INFORMATION:

NAME	COUNTRY
IMP COLLEGE INNOVATIONS LTD	GB
KNUTTON STUART	GB
FRANKEL GAD MEIR	GB

APPL-NO: GB00205374
APPL-DATE: November 29, 2002

PRIORITY-DATA: GB00205374W (November 29, 2002)

INT-CL (IPC): A61 K 39/108; C07 K 14/245; A23 C 9/00
EUR-CL (EPC): A23L001/03; A23L001/30, A23L001/305 , A61K039/108 , C07K014/245

ABSTRACT:

CHG DATE=20040629 STATUS=O>A pharmaceutical composition, vaccine, food product or kit of parts comprising a polypeptide or polypeptides and/or polynucleotide or polynucleotides in combination comprising or encoding a polypeptide or polypeptides in combination comprising at least two different EspA polypeptides, not being derivable from the same naturally occurring full length EspA polypeptides sequence, together with a pharmaceutically acceptable diluent or carrier. Vaccination with a single type of EspA is not considered to confer protective immunity, despite the high degree of sequence conservation. A combination vaccine may provide such protective immunity and may be useful in providing protection against bacterial infection.

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L2: Entry 13 of 17 File: DWPI Jun 23, 2004

DERWENT-ACC-NO: 2004-450616
DERWENT-WEEK: 200472

TITLE: Pharmaceutical composition useful for treating diarrhea, having polypeptide or polypeptides and/or polynucleotide or polynucleotides in combination comprising or encoding polypeptide or polypeptides in combination having EspA polypeptides

INVENTOR: FRANKEL, G M; KNUTTON, S

PRIORITY-DATA: 2002WO-GB05374 (November 29, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 2002347314 A1	June 23, 2004		000	A61K039/108
WO 2004050119 A1	June 17, 2004	E	093	A61K039/108

INT-CL (IPC): A23 C 9/00; A61 K 39/108; C07 K 14/245; C12 R 1:225

ABSTRACTED-PUB-NO: WO2004050119A
BASIC-ABSTRACT:

NOVELTY - A pharmaceutical composition (I) comprising a polypeptide or polypeptides and/or polynucleotide or polynucleotides in combination comprising or encoding a polypeptide or polypeptides in combination comprising at least two different EspA polypeptides, not derived from the same naturally occurring full length EspA polypeptide sequence, together with a diluent or carrier.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a chimeric polypeptide (II) comprising or consisting of one or more copies of at least two different EspA polypeptides, not derived from the same naturally occurring full length EspA polypeptide sequence;

(2) a polynucleotide (III) encoding (II);

(3) a recombinant microorganism (IV) comprising (III);

(4) a peptidomimetic compound (V) corresponding to (II);

(5) a vaccine (VI) effective against bacterial infection, for example enteropathogenic Escherichia coli (EHEC) and/or enterohemorrhagic E.coli (EPEC) infection, comprising the polypeptide or polypeptides and/or polynucleotide or polynucleotides of (I), or comprising any one of (II)-(V);

(6) a food product (VII) comprising foodstuff and a polypeptide or polypeptides and/or polynucleotide or polynucleotides of (I), or comprising a foodstuff and any one of (II)-(V);

(7) a kit of portions (VIII) comprising a polypeptide or polynucleotide, polypeptides and/or polynucleotides of (I) and optionally a diluent or carrier;

(8) a pharmaceutical composition (C1) comprising any one of (II)-(V), and a diluent or carrier;

(9) use of polypeptide or polypeptides and/or polynucleotide or polynucleotides in combination comprising or encoding a polypeptide or polypeptides in combination comprising at least two different EspA polypeptides, not derived from the same naturally occurring full length EspA polypeptide sequence, in the manufacture of a medicament for the treatment of a human or animal with or at risk of bacterial infection, or in the manufacture of a composition for use as a food supplement or a food additive;

(10) an antibody (IX) preparation reactive against two or more EspAs for use in medicine; and

(11) a pharmaceutical composition (C2) comprising (IX) and a diluent or carrier.

ACTIVITY - Antibacterial; Antidiarrheic; Antiinflammatory; Gastrointestinal-Gen.

MECHANISM OF ACTION - Vaccine (claimed). Analysis of EspA-specific immune responses in mouse bacterial colonization and disease caused by Citrobacter rodentium was carried out as follows: Mucosal and systemic vaccination regimes using enterotoxin-based adjuvants were employed to elicit immune responses to recombinant EspAs, for example from EPEC strain E2348/69 (EPEC O127:H6) and EHEC strain 85-170 (EHEC O157:H7). Immune responses to EspA antigens in mice infected with C.rodentium were measured in order to determine whether infected animals developed acquired immunity. Immunization was carried out by parenteral administration of EspAs. The result indicated that EspAs were capable of limiting colonization and disease caused by experimental C.rodentium infection.

USE - (I)-(VIII) or (C1) is useful in medicine, where the polypeptide or polypeptides comprise full length EspAs or the polypeptide(s) or polynucleotide(s) or components of a recombinant microorganism such as Bifidobacterium or Lactobacillus. (I)-(VIII) or (C1) is useful for manufacturing a medicament for the treatment of human or animal with or at risk of bacterial infection. (I)-(VIII) or (C1) is useful for manufacturing a composition for use as a food supplement or a food additive. (I)-(IX), (C1) or (C2) is useful for treating a human or animal with or at risk of bacterial infection, which involves administering (I)-(IX), (C1) or (C2) to the human or animal. The bacterial infection causes an histopathologic effect on intestinal epithelial cells, known as attachment and effacement (A/E). The bacterial infection comprises infection by one or more of enteropathogenic E.coli and/or enterohemorrhagic E.coli, Shiga toxigenic E.coli, Hafnia alvei, and Citrobacter rodentium. The bacterial infection comprises E.coli O157:H7, and the polypeptide or polypeptides comprise E.coli O157:H7 EspA or its fragment. (V) and/or (IX) is useful for manufacturing a medicament for the treatment of a human or animal with or at risk of bacterial infection. (IX) or (C2) is useful in the manufacture of a medicament or food supplement composition for use in the prevention or treatment of a bacterial disease (all claimed). (I) is useful for treating one or more infections which cause diseases affecting humans or domestic farm animals such as cows, sheep and goats, particularly food borne disease such as diarrhea, hemorrhagic colitis, acute gastroenteritis or hemolytic uremic syndrome (HUS).

L2: Entry 12 of 17 File: EPAB Oct 30, 1997

PUB-NO: WO009740063A2
DOCUMENT-IDENTIFIER: WO 9740063 A2
TITLE: PATHOGENIC ESCHERICHIA COLI ASSOCIATED PROTEIN

PUBN-DATE: October 30, 1997

INVENTOR-INFORMATION:

NAME	COUNTRY
FINLAY, B BRETT	CA
STEIN, MARKUS	CA
KENNY, BRENDAN	CA

INT-CL (IPC): C07 K 0/
EUR-CL (EPC): C07K014/245; C07K016/12

ABSTRACT:

CHG DATE=19990617 STATUS=O>The present invention provides the EspA polypeptide, which is secreted by pathogenic E. coli, such as the enteropathogenic (EPEC) and enterohemorrhagic (EHEC) E. coli. Diagnosis of disease caused by such pathogenic E. coli can be performed by standard techniques, such as those based upon the use of antibodies which bind to EspA to detect the protein, as well as those based on the use of nucleic acid probes for detection of nucleic acids encoding EspA protein. The invention also provides isolated nucleic acid sequences encoding EspA, EspA polypeptide, EspA peptides, a method for producing recombinant EspA, antibodies which bind to EspA, and a kit for the detection of EspA-producing E. coli. The invention also provides a method of immunizing a host with EspA to induce a protective immune response to EspA.

L2: Entry 12 of 17 File: EPAB Oct 30, 1997

PUB-NO: WO009740063A2
DOCUMENT-IDENTIFIER: WO 9740063 A2
TITLE: PATHOGENIC ESCHERICHIA COLI ASSOCIATED PROTEIN

PUBN-DATE: October 30, 1997

INVENTOR-INFORMATION:

NAME	COUNTRY
FINLAY, B BRETT	CA
STEIN, MARKUS	CA
KENNY, BRENDAN	CA

ASSIGNEE-INFORMATION:

NAME	COUNTRY
UNIV BRITISH COLUMBIA	CA
FINLAY B BRETT	CA
STEIN MARKUS	CA
KENNY BRENDAN	CA

APPL-NO: CA09700265
APPL-DATE: April 23, 1997

PRIORITY-DATA: US01599996P (April 23, 1996)

INT-CL (IPC): C07 K 0/
EUR-CL (EPC): C07K014/245; C07K016/12

ABSTRACT:

CHG DATE=19990617 STATUS=O>The present invention provides the EspA polypeptide, which is secreted by pathogenic E. coli, such as the enteropathogenic (EPEC) and enterohemorrhagic (EHEC) E. coli. Diagnosis of disease caused by such pathogenic E. coli can be performed by standard techniques, such as those based upon the use of antibodies which bind to EspA to detect the protein, as well as those based on the use of nucleic acid probes for detection of nucleic acids encoding EspA protein. The invention also provides isolated nucleic acid sequences encoding EspA, EspA polypeptide, EspA peptides, a method for producing recombinant EspA, antibodies which bind to EspA, and a kit for the detection of EspA-producing E. coli. The invention also provides a method of immunizing a host with EspA to induce a protective immune response to EspA.

L2: Entry 10 of 17 File: USPT Sep 18, 2001

US-PAT-NO: 6291435
DOCUMENT-IDENTIFIER: US 6291435 B1

TITLE: Treatment of diarrhea caused by enteropathogenic Escherichia coli

DATE-ISSUED: September 18, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yanmaele; Rosa P.	Edmonton			CA
Armstrong; Glen D.	Edmonton			CA

US-CL-CURRENT: 514/25; 514/53, 514/867, 536/17.2, 536/55.1, 536/55.2

CLAIMS:

What is claimed is:

1. A method to reduce the virulence of an EPEC organism, which method comprises contacting an EPEC organism which expresses virulence factors with an amount of a composition effective to reduce the expression of virulence factors of said organism, said composition comprising a monosaccharide or an oligosaccharide sequence, wherein said monosaccharide or oligosaccharide causes at least a 20% decrease in localized adherence of said organism.

2. The method of claim 1 wherein said monosaccharide or oligosaccharide sequence has from 1 to 5 saccharide units.

3. The method of claim 1 wherein said monosaccharide or oligosaccharide sequence is selected from the group consisting of LacNAc, LeX and LeY.

4. The method of claim 1 wherein said monosaccharide or oligosaccharide sequence is attached to a pharmaceutically acceptable support.

5. The method of claim 4 wherein said monosaccharide or oligosaccharide sequence is covalently attached to a pharmaceutically acceptable support through a non-peptidyl compatible linker arm.

6. The method of claim 5 wherein said linker arm is --(CH.sub.2).sub.8 C(O)--.

7. The method of claim 1 wherein said monosaccharide or oligosaccharide sequence is effective in reducing the virulence of at least two EPEC serotypes.

8. The method of claim 1, wherein said contact is effected in the gut of a subject with an EPEC infection.

9. A composition useful for reducing the virulence of an EPEC organism, which composition comprises a monosaccharide or an oligosaccharide sequence which reduces the expression of virulence factors by EPEC.

10. The composition of claim 9 wherein said monosaccharide or oligosaccharide sequence has from 1 to 5 saccharide units.

11. The composition of claim 9 wherein said monosaccharide or oligosaccharide sequence is selected from the group consisting of LacNAc, LeX and LeY.

12. The composition of claim 9 wherein said monosaccharide or oligosaccharide sequence is attached to a pharmaceutically acceptable support.

13. The composition of claim 12 wherein said monosaccharide or oligosaccharide sequence is covalently attached to a pharmaceutically acceptable support through a non-peptidyl compatible linker arm.

14. The composition of claim 13 wherein said linker arm is --(CH.sub.2).sub.8 C(O)--.

15. The composition of claim 9 wherein said monosaccharide or oligosaccharide sequence is effective in reducing the virulence of at least two EPEC serotypes.

16. The composition of claim 9, wherein said virulence factors are selected from the group consisting of bundle-forming pili and intimin.

17. A composition useful for reducing the virulence of an EPEC organism, which composition comprises a monosaccharide or an oligosaccharide sequence which causes at least a 20% decrease in localized adherence of EPEC.

18. The composition of claim 17 wherein said monosaccharide or oligosaccharide sequence has from 1 to 5 saccharide units.

19. The composition of claim 17 wherein said monosaccharide or oligosaccharide sequence is selected from the group consisting of LacNAc, LeX and LeY.

20. The composition of claim 17 wherein said monosaccharide or oligosaccharide sequence is attached to a pharmaceutically acceptable support.

21. The composition of claim 17 wherein said monosaccharide or oligosaccharide sequence is covalently attached to a pharmaceutically acceptable support through a non-peptidyl compatible linker arm.

22. The composition of claim 21 wherein said linker is --(CH.sub.2).sub.8 C (O)--.

23. The composition of claim 17 wherein said monosaccharide or oligosaccharide sequence is effective in reducing the virulence of at least two EPEC serotypes.

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L2: Entry 9 of 17 File: USPT Mar 12, 2002

US-PAT-NO: 6355254
DOCUMENT-IDENTIFIER: US 6355254 B1

TITLE: Pathogenic Escherichia coli associated protein EspA

DATE-ISSUED: March 12, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Finlay; B. Brett	Richmond			CA
Kenny; Brendan	Redland			GB
Stein; Markus	Quercegrossa			IT
Donnenberg; Michael S.	Baltimore	MD		
Lai; Li-Ching	Upper Arlington	OH		

US-CL-CURRENT: 424/241.1; 424/185.1, 424/190.1, 530/350

CLAIMS:

We claim:

1. An isolated EspA polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:2 or SEQ ID NO:4.

2. A method of immunizing a host susceptible to disease caused by an EspA-producing organism, comprising:

a) administering to a host an EspA polypeptide of claim 1; and

b) inducing an immune response in a host susceptible to disease caused by the EspA-producing organism.

3. The method of claim 2, wherein the EspA-producing organism is E. coli.

4. The method of claim 3, wherein the EspA-producing E. coli is enteropathogenic E. coli.

5. The method of claim 3, wherein the EspA-producing E. coli is enterohemorrhagic E. coli.

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L2: Entry 8 of 17 File: USPT Oct 21, 2003

US-PAT-NO: 6635259
DOCUMENT-IDENTIFIER: US 6635259 B2

TITLE: Escherichia coli secreted protein B

DATE-ISSUED: October 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kaper; James B.	Pasadena	MD		
Jarvis; Karen	Arnold	MD		

US-CL-CURRENT: 424/241.1; 424/185.1, 424/190.1, 435/6, 435/7.1, 435/7.2, 435/7.32, 435/7.37, 530/350, 530/402

CLAIMS:

We claim:

1. A purified and isolated polypeptide having the amino acid sequence of SEQ ID NO: 5.

2. A method for diagnosing active infection with enterohemorhagic E.coli (EHEC) comprising the steps of: obtaining a sample of lymphocytes from a subject who is suspected of being infected with EHEC; contacting said sample of lymphocytes with an E.coli secreted protein consisting of SEQ ID NO:5, and optionally with EspA; using said E.coli secreted protein or proteins to detect the presence of antibodies which are specific to said E.coli secreted protein or proteins in said sample of lymphocytes, said antibodies recognizing said E.coli secreted protein or proteins and binding thereto; and examining said E.coli secreted protein or proteins for the presence of said bound antibody, wherein the presence of said bound antibody indicates active infection with EHEC.

3. A kit for determining if a subject has been infected with enterohemorhagic E.coli (EHEC), said kit comprising: a container for holding a fluid or tissue sample obtained from said subject; and a substance containing purified E.coli secreted protein EspB (SEQ ID NO:5), and optionally purified E.coli secreted protein EspA, and an indicator, wherein said indicator changes color when in contact with one or more antibodies that bind to said purified E.coli secreted protein or proteins.

4. A kit for determining if a subject has been infected with enterohemorhagic E.coli (EHEC), said kit comprising: a container for holding a fluid or tissue sample obtained from said subject; and a substance containing purified E.coli secreted protein EspB (SEQ ID NO:5); and an indicator, wherein said indicator changes color when in contact with one or more antibodies that bind to said purified E.coli secreted protein EspB (SEQ ID NO:5).

L2: Entry 7 of 17 File: PGPB Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020115829
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020115829 A1

TITLE: Pathogenic escherichia coli associated protein

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Finlay, B. Brett	Richmond	MD	CA	
Kenny, Brendan	Bristol	OH	GB	
Stein, Markus	Quercegrossa		IT	
Donnenberg, Michael S.	Baltimore		US	
Lai, Li-Ching	Upper Arlington		US	

APPL-NO: 09/ 967347 [PALM]
DATE FILED: September 28, 2001

RELATED-US-APPL-DATA:
Application 09/967347 is a division-of US application 09/171517, filed August 10, 1999, PATENTED
Application 09/171517 is a a-371-of-international WO application PC/T/CA97/00265, filed April 23, 1997, UNKNOWN
Application is a non-provisional-of-provisional application 60/015999, filed April 23, 1996,

INT-CL: [07] A61 K 39/02, C07 K 1/00, C07 K 14/00, C07 K 17/00

US-CL-PUBLISHED: 530/350
US-CL-CURRENT: 530/350

REPRESENTATIVE-FIGURES: NONE

ABSTRACT:

The present invention provides a polypeptide, called EspA, which is secreted by pathogenic E. coli, such as the enteropathogenic (EPEC) and enterohemorrhagic (EHEC) E. coli. The invention also provides isolated nucleic acid sequences encoding EspA polypeptide, EspA peptides, a recombinant method for producing recombinant EspA, antibodies which bind to EspA, and a kit for the detection of EspA-producing E. coli.

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims priority from U.S. Provisional Application No.

L2: Entry 7 of 17 File: PGPB Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020115829
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020115829 A1

TITLE: Pathogenic escherichia coli associated protein

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Finlay, B. Brett	Richmond	MD	CA	
Kenny, Brendan	Bristol	OH	GB	
Stein, Markus	Quercegrossa		IT	
Donnenberg, Michael S.	Baltimore		US	
Lai, Li-Ching	Upper Arlington		US	

US-CL-CURRENT: 530/350

CLAIMS:

We claim:

1. An isolated EspA polypeptide characterized by: a) being a secreted protein from enteropathogenic or enterohemorrhagic E. coli; and b) comprising an amino acid sequence as set forth in SEQ ID NO:2 or SEQ ID NO:4.

2. An isolated polynucleotide encoding the polypeptide of claim 1.

3. An isolated polynucleotide selected from the group consisting of: a) the nucleic acid sequence set forth in SEQ ID NO: 1; b) the nucleic acid sequence set forth in SEQ ID NO: 1, wherein T is U; c) nucleic acid sequences complementary to a); and d) fragments of a), b) or c) that are at least 15 nucleotide bases in length and that hybridize under stringent conditions to DNA which encodes the polypeptide set forth in SEQ ID NO: 2.

4. An isolated polynucleotide selected from the group consisting of: a) the nucleic acid sequence set forth in SEQ ID NO: 3; b) the nucleic acid sequence set forth in SEQ ID NO: 3, wherein T is U; c) nucleic acid sequences complementary to a); and d) fragments of a), b) or c) that are at least 15 nucleotide bases in length and that hybridize under stringent conditions to DNA which encodes the polypeptide set forth in SEQ ID NO: 4.

5. A nucleic acid expression vector comprising a promoter operably linked to the polynucleotide of claim 2.

6. A host cell containing the vector of claim 5.

7. An antibody specific for the polypeptide of claim 1.

8. The antibody of claim 7, wherein the antibody is monoclonal.

9. The antibody of claim 7, wherein the antibody is polyclonal.

10. A method for detecting EspA polypeptide in a sample, comprising: a) contacting the sample with the antibody of claim 7; and b) detecting binding of the antibody of claim 7 to EspA polypeptide, wherein binding is indicative of the presence of EspA polypeptide in the sample.

11. The method of claim 10, wherein the sample is tissue.

12. The method of claim 10, wherein the sample is a biological fluid.

13. The method of claim 10, wherein the presence of EspA polypeptide in the sample is indicative of infection by enteropathogenic E. coli.

14. The method of claim 10, wherein the presence of EspA polypeptide in the sample is indicative of infection by enterohemorrhagic E. coli.

15. A method of immunizing a host susceptible to disease caused by an EspA-producing organism, comprising: a) administering to the host an EspA polypeptide of claim 1; and b) inducing a protective immune response to EspA in the host.

16. The method of claim 15, wherein the EspA-producing organism is E. coli.

17. The method of claim 16, wherein the EspA-producing E. coli. is enteropathogenic E. coli.

18. The method of claim 16, wherein the EspA-producing E. coli. is enterohemorrhagic E. coli.

19. A method of ameliorating disease caused by EspA-producing organism, comprising: a) immunizing a host with the polypeptide of claim 1; and b) inducing an immune response in the host to the EspA polypeptide, thereby ameliorating disease caused by infection of the host by EspA-producing organism.

20. The method of claim 19, wherein the EspA-producing organism is E. coli.

21. The method of claim 19, wherein the EspA-producing E. coli. is enteropathogenic E. coli.

22. The method of claim 19, wherein the EspA-producing E. coli. is enterohemorrhagic E. coli.

23. A method for detecting a polynucleotide in a sample, comprising: a) contacting a sample suspected of containing espA polynucleotide with a nucleic acid probe that hybridizes to the polynucleotide of claim 2; and b) detecting hybridization of the probe with the polynucleotide, wherein the detection of hybridization is indicative of espA polynucleotide in the sample.

24. A method for producing a recombinant espA polynucleotide, comprising: inserting a nucleic acid encoding a selectable marker into the polynucleotide of claim 2, such that the resulting polynucleotide encodes a recombinant EspA polypeptide

containing the selectable marker.

25. A polynucleotide produced by the method of claim 24.

26. A host cell containing the polynucleotide of claim 25.

27. A method for producing a recombinant EspA polypeptide, comprising: a) growing a host cell containing a polynucleotide encoding a EspA polypeptide of claim 1 under conditions which allow expression of EspA polypeptide; and b) isolating the polypeptide.

28. A method to identify a compound that affects bacterial type III secretion, comprising: a) introducing the polynucleotide of claim 5 into bacteria having a bacterial type III secretion system; b) growing the bacteria under conditions which allow expression of the polypeptide encoded by the polynucleotide; c) contacting the bacteria with a candidate compound; and d) measuring secretion of the polypeptide, and thereby identifying a compound that affects type III secretion.

29. A method for producing a nonpathogenic organism, comprising: a) generating a mutation in a polynucleotide encoding a EspA polypeptide of claim 1; b) inserting a nucleic acid sequence encoding a selectable marker into the site of the mutation; c) introducing the mutated espA polynucleotide of step b) into a chromosomal espA gene of an organism to produce a mutation in the chromosomal espA gene; and d) selecting organisms having the mutation.

30. The method of claim 29, wherein the nucleic acid sequence encoding a selectable marker encodes resistance to kanamycin.

31. The method of claim 29, wherein the organism is E. coli.

32. An organism with a mutated espA gene produced by the method of claim 29.

33. A kit useful for the detection of a EspA polypeptide of claim 1, comprising carrier means being compartmentalized to receive in close confinement therein one or more containers comprising a container containing an antibody which binds to EspA polypeptide.

34. The kit of claim 33, wherein the antibody is detectably labeled.

35. The kit of claim 34, wherein the label is selected from the group consisting of radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, and an enzyme.

36. A kit useful for the detection of an espA polynucleotide of claim 2, comprising carrier means being compartmentalized to receive in close confinement therein one or more containers comprising a container containing the nucleic acid probe that hybridizes to espA polynucleotide.

37. The kit of claim 36, wherein the probe is detectably labeled.

38. The kit of claim 37, wherein the label is selected from the group consisting of radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, and an enzyme.

39. A method of producing a fusion protein comprising: a) growing a host cell containing a polynucleotide of claim 2 operably linked to a polynucleotide encoding

a polypeptide or peptide of interest under conditions which allow expression and secretion of the fusion protein; and b) isolating the fusion protein.

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CLAIMS:

1. An IgY antibody immunologically specific for an attaching and effacing Eschenchia coli (AEEC) virulence-associated protein selected from the group consisting of Eae, Tir, EspA and Paa, said antibody preventing an in vivo AEEC intestinal infection when administered to a mammal.

2. The antibody of claim 1, wherein said antibody prevents the adhesion of said AEEC to the intestine of said mammal.

3. The antibody of any one of claims 1 or 2, wherein said antibody prevents the development of attaching and effacing (A/E) intestinal lesions associated with said AEEC.

4. The antibody of any one of claims 1 to 3, wherein said antibody is administered orally.

5. The antibody of any one of claims 1 to 4, wherein said antibody is resistant to gastrointestinal digestion.

6. The antibody of any one of claims 1 to 5, wherein the mammal is selected from the group consisting of humans, pigs, bovines, ovines, caprines, rabbits, dogs and cats.

7. The antibody of any one of claims 1 to 6, wherein the mammal is a human.

8. The antibody of any one of claims 1 to 7, wherein the AEEC is selected from the

group consisting of enteropathogenic E. coli (EPEC) strains and enterohemorrhagic E. coli (EHEC) strains.

9. A fowl egg containing an IgY antibody as defined in any one of claims 1 to 8.

10. The fowl egg of claim 9, wherein said egg is obtained from a fowl immunized against at least one AEEC virulence-associated protein.

11. The fowl egg of claim 10, wherein said fowl is a chicken.

12. An isolated yolk of a fowl egg according to any one of claims 9 to 11.

13. A composition comprising: at least one element selected from the group consisting of: an IgY antibody according to any one of claims 1 to 8; a fowl egg according to any one of claims 9 to 11; and an isolated yolk according to claim 12; and a biologically acceptable vehicle or carrier.

14. The composition of claim 13, wherein said composition is formulated to be administered orally to a mammal.

15. The composition of claim 13 or 14, wherein said composition is formulated under the form of a pharmaceutical composition.

16. The composition of claim 13 or 14, wherein said composition is formulated under the form of a nutraceutical composition.

17. A food additive comprising at least one element selected from the group consisting of: an IgY antibody according to any one of claims 1 to 8; a fowl egg according to any one of claims 9 to 11; an isolated yolk according to claim 12; and a composition according to any one of claims 13 to 16.

18. A process for obtaining an IgY antibody according to any one of claims 1 to 8, the process comprising the steps of: a) actively immunizing a fowl hen for eliciting the production of antibodies in an egg of said hen; and b) recovering said antibodies from said egg.

19. The process according to claim 18, further comprising the step of administering at least one booster of at least one AEEC virulence-associated protein to maintain a hyperimmune state in said hen.

20. The process according to claim 18 or 19, further comprising the step of purifying said antibodies from a yolk fraction of said egg.

21. Use of at least one element selected from the group consisting of: an IgY antibody according to any one of claims 1 to 8; a fowl egg according to any one of claims 9 to 11; and an isolated yolk according to claim 12; in the preparation of a composition for preventing a mammalian AEEC infection.

22. A method for preventing an attaching and effacing Escherichia coli (AEEC) infection in a mammal, said method comprising the step of orally administering to said mammal at least one element selected from the group consisting of: an IgY antibody according to any one of claims 1 to 8; a fowl egg according to any one of claims 9 to 11; and an isolated yolk according to claim 12.

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